Questions & Answers
Grid West/TIG Decision Point 2
August 4, 2005

Background

BPA and many Northwest utilities are deciding this September what course to pursue to improve Northwest transmission operation and planning. Three choices are on the table:

1. Further develop **Grid West** as a regional transmission entity.
2. Develop a set of contracts among utilities to provide many, but not all, of the same services. This is the **Transmission Improvements Group** proposal.
3. Transmission owners **continue separate operations**. If this direction is chosen, BPA will, for its part, continue to amend its own business practices.

The choice before the region this summer is not a final action but a commitment to further develop and fund either a proposal or support continuing separate operations.

Questions and Answers

1. What are the three alternatives?

1. TIG
2. Grid West
3. Continue Separate Operations

TIG would create a set of contracts among Northwest utilities that own high-voltage transmission to coordinate their operation for reliability. It would create an independent market monitor, central transmission planning with backstop authority, and a single OASIS as separate contracts, under the overall coordination of a small staff and coordinating board.

Grid West would create a new entity to plan and operate Northwest transmission for participating utilities. In addition to the market monitoring, planning and OASIS services TIG would offer, Grid West would have backstop authority to build transmission (via a 3rd party) if utilities don't, and would offer a market for generation that supports grid operations. Grid West would operate under FERC jurisdiction.

The **Continue Separate Operations** alternative would leave each transmission owner working separately under FERC, NERC, WECC and state rules.

2. Where does BPA stand on these three choices?

BPA doesn't see continuing separate operations as a preferred alternative. Because the problems facing the transmission grid today go beyond the borders of any one utility, this alternative could result in the region becoming more fragmented and more out of step with national trends toward better coordination of grid operations.

BPA believes either Grid West or TIG could prove a viable choice and both hold the potential to capture the benefits of "one utility" operation and planning of the region's transmission system.

Grid West has been under development longer and has more detail behind it. It's been developed to conform to BPA's principles, and looks like it will work, especially given FERC's statements in its July 1 ruling that Grid West would not extend FERC authority over BPA or publicly owned utilities.

TIG has evolved quickly to the point where it could meet many of the objectives BPA has laid out. It is still sketchy in some of its details compared to the Grid West proposal due to its recent inception. Also, to achieve the most crucial outcomes for improved reliability, TIG would have to realize all of the elements now proposed, not just bits and pieces. The Reliability and Balancing Authority is a crucial part.

3. What would BPA do next under each option?

To pursue Grid West, the region would commit approximately $20 million for two years of funding to seat a developmental board and develop transmission agreements to the point where they can be offered to transmission owners (Decision Point 3). Work on the TIG proposal would stop.

To pursue TIG, BPA would commit funds and staff resources to complete the TIG proposal over the next six to 12 months and then decide whether to execute agreements to implement the TIG approach. Work on Grid West would stop.

Under the continue separate operations approach, BPA would give up on the idea of applying the "one utility" vision to transmission, stop work on both Grid West and TIG and focus on reforming its own business practices.

4. What about costs and benefits?

Grid West costs

Grid West costs as presented in The Structure Group analysis are derived from the bottom up. They take advantage of existing facilities – Dittmer as the dispatch center with an existing Sierra Pacific space in Reno as backup. They're calculated down to the square foot of floor space per FTE. The systems costs are lower than those of earlier RTOs because of its scaled back design and simply because the pioneers paid the costs of developing new systems. The Northwest, coming late to the party, doesn't have to break new ground here and can buy many off-the-shelf systems that have been developed by other RTOs..

The Structure Group estimated Grid West start-up costs at about $124 million and annual operating costs at about $86 million/year including the costs of financing start up.

An additional $20 million is needed by the filing utilities, including BPA, to pay for further Grid West development until operations begin in 2008, if Grid West goes operational. These costs would be included in Grid West start up costs and financed like other start up costs. This would add about another $3 million to Grid West annual costs.

BPA has estimated the internal costs BPA and other utilities would likely incur in operating in a Grid West environment at about $12 million, about half of which would be BPA costs. These are a rough estimate and need further refinement.

Combining these cost estimates brings the total annual costs of Grid West, including the internal costs incurred by BPA and other utilities doing business in Grid West environment, to about $101 million annually.

The filing utilities have invested about $16 million to date in developing the Grid West proposal. These costs would be recovered by Grid West in its grid management charge and would add about $2.5 million to Grid West's annual revenue requirement. They are not included in the $101 million estimate because these costs are sunk and should not be taken into account in making a decision to proceed.

Grid West benefits, the RRG analysis

The preliminary benefit analysis Grid West's Regional Representatives Group developed draws extensively on local expertise and NW-specific analysis. The RRG's Risk Reward Group produced new quantitative Grid West benefit estimates using the PowerWorld Optimal Flow model, ABB's Grid View model, SSG-WI data on generators, WECC operations data, historic power usage data, and regional productivity estimates. Participation in these analyses was broad and BPA had an active role in each analysis.

The quantitative results of these analyses were presented in a "menu" format from which users can select the types and magnitudes of benefits they deem most representative of expected outcomes. That said, if you total all the figures presented by the RRG, the annual regional benefit total ranges from $133 to $444 million for the 3 consolidator scenario (Bonneville, Pacificorp and Idaho). The 10 consolidator (all filing utilities) ran from $264 to $888 million – but the 10 consolidator figures were not vetted as thoroughly as were the 3 consolidator figures.

Grid West Regional Benefits, BPA Analysis

BPA used the RRG analysis to derive its own estimate of Grid West benefits and relied on our internal expertise (Mittelstadt/Watkins disturbance analysis) and valuation methods used in the August 2003 East Coast Outage Report. We believe these are conservative estimates.

The results of these efforts yielded quantified regional benefits of $106 to $181 million/year.

Significant unquantified benefits include:

- Planning Benefits (construction gets built at least cost, costs fairly shared)
- Potential for up to 6 more control areas to join – augmenting reliability, Redispatch, contingency reserve, and regulating reserve estimates.
- Long term generation siting efficiencies (deriving from clearer price signals)

BPA's Take on Grid West Net Regional Benefits

Based on these preliminary estimates, BPA believes the net quantified annual regional benefits of Grid West are likely to range between $5 million and $80 million a year.

TIG cost analysis

TIG costs are estimated to be between $51 and $61 million a year. BPA expects TIG benefits to exceed costs and has asked TIG to produce an estimate of the benefits it expects from the TIG proposal by Decision Point 2.

Costs and benefits of continuing separate operations

Costs of continuing separate operations have not been estimated. BPA's transmission rates will rise 12 percent this fall. BPA is doing most of the regional transmission investment under its separate operations so its customers pay the freight for that investment and will continue to do so in the future. BPA's business practices and tariffs are changing and will likely continue to change to maintain reliable, viable grid function, with or without Grid West or TIG.

5. What about cost-shifts?

Our Decision Point 2 analysis is a regional level analysis – our goal is to estimate benefits to the region as a whole. The more complicated task of determining where and to whom those benefits flow will be undertaken prior to Decision Point 4 (if we decide to move forward after Decision Point 2). That said, we have kept our goal of minimizing cost shifts in mind as we have participated in the design of Grid West, guiding decisions towards conclusions that avoid cost shifting. Furthermore,

- BPA has resolved the GTA issue in a way that assures its GTA customers will be treated as if they were directly served by BPA with or without Grid West or TIG.

- BPA has proposed an ATC methodology. This methodology would be extended region-wide under both the Grid West and TIG proposal.

- BPA continues to work with its customers to define a contract lock to assure continuation of their existing contract rights under Grid West.

6. How do the three alternatives affect transfer services provided by BPA to federal power purchasers?

Transfer service acquired by BPA for federal power deliveries is not expected to be impacted in any material way under any of the three alternatives under consideration, with one notable exception. The Grid West alternative may provide an avenue of relief for improving local quality of service, i.e. reliability, maintenance and outage coordination, voltage, etc. Poor quality of service on Grid West-controlled facilities will be addressed through Grid West protocols and transmission owner obligations to address the standards in effect governing service quality, interconnections and related matters.

7. What is the status of contract lock in relation to choosing either TIG, Grid West or continuing separate operations?

BPA is pursuing contract lock discussion with its customers. Contract lock would apply only if BPA ultimately joined Grid West because Grid West creates an independent board, subject to FERC jurisdiction, and over time contracts will roll over to Grid West service. These features that are unique to Grid West give rise to questions regarding the implementation of BPA transmission contracts through Grid West.

TIG does not have these features so contract lock would not apply. Under the status quo, BPA would continue to modify its tariff and business practices as it has in the past.

8. What about resource adequacy?

BPA and the Northwest Power and Conservation Council are conducting a separate regional process to design a regional resource adequacy standard. This effort complements and would support either Grid West or TIG approach. It would also work with the status quo, but since transmission operation and planning would remain fragmented, it would likely be more difficult to coordinate and implement regional resource adequacy planning under this direction.

9. How much more would Grid West cost than TIG?

That depends on how much of TIG is implemented. As it's evolved, with full implementation, TIG would cost tens of millions of dollars to implement, just like Grid West.

10. What about FERC?

BPA, Pacificorp and Idaho successfully sought and obtained a favorable FERC ruling that makes clear FERC supports Grid West as an Order 888 proposal even though it is not an Order 2000 RTO. The ruling helps assure that the publics' status relative to FERC would be left unchanged under Grid West. However, as commissioners noted, current FERC commissioners cannot bind their successors.

Investor-owned utilities are subject to FERC jurisdiction. IOUs will need to consider whether TIG would fulfill their FERC Order 888 responsibilities. FERC also recently cancelled its Standard Market Design proposal.

We note that the energy bill, which the President is expected to sign on August 8, 2005, give FERC reliability authority over all control areas, including BPA and the publics.

11. If this decision is preliminary, why is it such a big deal?

Time, money, and the increasing nervousness of transmission operators. A final, irrevocable action comes when we sign contracts (Decision Point 4). The decision before us is for the region to decide which path to pursue so time and money can be focused on an alternative that will provide the greatest value.

12. If this decision is such a big deal, why is it preliminary? Why haven't you done NEPA on it yet, for example?

NEPA analyzes proposals and must be completed before taking an irrevocable action, like signing a contract. The time to do NEPA is when we have a complete proposal to analyze.

We have been watching this issue from an environmental perspective, and so far, it fits well within the environmental outcomes analyzed in the Business Plan EIS. We are refreshing the Business Plan EIS as a whole, and will cross-reference to assure any environmental outcomes not already considered in the previous iteration are covered in the new Supplemental Analysis. That track will merge with the TIG/Grid West contract consideration when we get there. In other words, we're doing the work in the background. These sorts of macro-planning concepts are hard to apply to environmental outcomes. The business Plan EIS did a thorough job considering impacts of different macro-policy choices a decade ago. We are reexamining that now, including these issues, and will bring the two threads together before making an irrevocable decision/signing contracts.

13. What models frame the Grid West and TIG alternatives?

Grid West is a regional transmission entity, modeled on RTOs but scaled back to reflect Northwest needs and interests.

TIG is based on the Mid-Continent Area Power Pool (MAPP) experience. MAPP has 35 years of evolving joint operation of public and investor-owned utility transmission under a set of contracts.

Both models have real-world precursors from which the Northwest can learn.

14. What are some key differences between Grid West and TIG?

Grid West is a more fully developed proposal and a separate entity with well-developed governance rules. It also could, with agreement of its members, later expand its services being offered. Grid West would operate under FERC jurisdiction.

TIG would operate largely through multi-lateral contracts among participants. It specifically excludes the possibility of expanding into financial transactions or energy markets to avoid FERC jurisdiction. One question to be answered is whether participation in TIG would fulfill the FERC Order 888 responsibilities of investor-owned utilities. MAPP, the model for TIG, does include participation by investor-owned utilities and has, so far, met FERC approval of the responsibilities of its participants.

15. Why is it so important for the Northwest to take action as a region?

The Northwest's power system is based on interconnected, interdependent generation from many dams on one river system, the Columbia River. Other regions depend primarily on separate, discrete, independent generation from separate, discrete thermal plants. (Even Hydro Quebec does not depend on sequential generation from plants along one river, but on several distinct, independent sets of plants.)

Because of the remote and sequential locations of the interdependent major generators (the dams) the Northwest is more dependent on long-term transmission to effect rational generation choice than other regions. Major load centers, particularly Seattle and Portland, are distant from major generation points.

16. What about BPA's principles, must haves, etc?

In 2000, BPA articulated a set of principles to guide its participation in any regional transmission organization. Subsequently, it identified key issues that must be addressed by Grid West in December 2003 and by TIG in December 2004. All these remain the issues and principles upon which BPA will evaluate its choice.

17. How do I comment?

BPA asks that commenters take some time to carefully review both proposals on their respective web sites, and consider their comments in the light of their own needs and concerns and those articulated by BPA. The materials to use in these considerations are:

1) BPA materials (posted on BPA web site):
   http://www.bpa.gov/corporate/business/restructuring/

   a. BPA letter on this Decision Point 2 comment period (Aug. 4, 2005)
   b. External Questions & Answers
   c. BPA preliminary regional cost-benefit analysis of Grid West

d. Keeping Current – WANTED: One-Utility Transmission for the Pacific Northwest
e. BPA letter on Grid West Decision Point #1 (Dec. 2004)
f. BPA Principles for RTO participation

2) Grid West materials (posted on Grid West web site)
http://www.gridwest.com/DP2Info.htm

a. Executive Summary of Grid West proposal
b. Grid West preliminary benefit analysis
c. Grid West preliminary cost analysis
d. Transmission Services Liaison Group proposal on Grid West services.
e. Grid West Pricing Group proposal on Grid West pricing.
f. BPA/PAC/IPC request to FERC for a declaratory order and FERC's response.
g. Grid West bylaws (adopted Dec. 2004)

3) TIG materials (posted on TIG web site)
http://www.tig-nw.kristiwallis.com/

a. TIG final report, August 2005
b. Documents from the Common Oasis, Flow-based ATC, Planning and Expansion, and Market Monitoring charter groups

The comment period for Decision Point 2 opens August 4, 2005. Comments will be accepted through Sept. 9, 2005. BPA expects to announce its decision by Sept. 30, 2005.

A list of questions designed to provoke more insight into the alternatives and a better understanding of why people see the choices the way they do has been developed. The questions BPA would like you to consider are:

1. Do you agree with BPA's goal of applying the "one utility" vision to the region's transmission system?
2. Please describe how well you think each alternative achieves the six benefits described on pages 2-3 of this letter (i.e., planning and expansion, reliability, ATC, congestion management, market monitoring, and "one stop" stopping).
3. How well do you believe the Grid West and TIG proposals meet the goal of effective decision-making that is not unduly influenced by market participants?
4. If BPA supports the TIG proposal, are you committed to all of the elements of the TIG proposal? If not, which ones are troubling? And why?
5. If the TIG proposal were to be chosen, how likely would it be that the proposal would be successfully implemented?

6. If BPA supports Grid West, are you committed to all of the elements of the Grid West proposal? If not, which ones are troubling? And why?
7. If the Grid West proposal were to be chosen, how likely would it be that the proposal would be successfully implemented?
8. If you are a supporter of the TIG alternative, please explain why adopting the TIG alternative will be in the collective best interests of all of BPA's customers who depend on the Northwest transmission grid and of other stakeholders who have an interest in regional transmission issues.
9. If you are a supporter of the Grid West alternative, please explain why adopting the Grid West alternative will be in the collective best interests of all of BPA's customers who depend on the Northwest transmission grid and of other stakeholders who have an interest in regional transmission issues.
10. The RRG recently completed an examination of the benefits of the Grid West proposal. Do you have additional views on the benefits of the Grid West proposal that you have not already brought to our attention?
11. Do you have additional views on the estimated costs of the TIG and Grid West proposals.
12. What 2-3 improvements might you suggest for each alternative?
13. The Grid West and TIG alternatives seem to be quite similar. Please suggest how these alternatives may converge?
14. Where do you think the region will be in ten years under each alternative?

The preferred way is to submit comments on-line at: www.bpa.gov/comment.

Comments may also be mailed to:

Bonneville Power Administration
Attn: Communications - DM-7
P.O. Box 14428
Portland, OR 97293-4428

Or fax comments to 503-230-3285

When sending in comments, please refer to the following project title:
Public Comment Period - Decision Point 2.

18. How can I get any additional questions and concerns answered?

Should you have any questions about the process, or if you would like to meet with BPA Executive Vice President for Industry Restructuring Allen Burns about these alternatives, please contact your Account Executive or Constituent Account Executive. Or you may contact Tara Exe, Project Coordinator at 503-230-4169.